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KD-Validated Anti-FURIN Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1136

Product Information

Application	WB, FC, ICC
Primary Accession	P09958
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB2160
Calculated MW	86678
Gene Name	FURIN
Aliases	FURIN; Furin, Paired Basic Amino Acid Cleaving Enzyme; PCSK3; SPC1; PACE; FUR; Paired Basic Amino Acid Residue-Cleaving Enzyme 3; Proprotein Convertase Subtilisin/Kexin 3; Subtilisin-Like Proprotein Convertase 1; EC 3.4.21.75; Furin; Paired Basic Amino Acid Cleaving Enzyme (Furin, Membrane Associated Receptor Protein); Furin (Paired Basic Amino Acid Cleaving Enzyme); Proprotein Convertase Subtilisin/Kexin Type 3; Furin, Membrane Associated Receptor Protein; Dibasic Processing Enzyme; Dibasic-Processing Enzyme; FES Upstream Region; EC 3.4.21
Immunogen	A synthesized peptide derived from human Furin

Additional Information

Gene ID	5045
Other Names	Furin, 3.4.21.75, Dibasic-processing enzyme, Paired basic amino acid residue-cleaving enzyme, PACE, FURIN {ECO:0000303|PubMed:7690548, ECO:0000312|HGNC:HGNC:8568}

Protein Information

Name	FURIN {ECO:0000303|PubMed:7690548, ECO:0000312|HGNC:HGNC:8568}
Function	Ubiquitous endoprotease within constitutive secretory pathways capable of cleavage at the RX(K/R)R consensus motif (PubMed:11799113, PubMed:1629222, PubMed:1713771, PubMed:2251280, PubMed:24666235, PubMed:25974265, PubMed:7592877, PubMed:7690548, PubMed:9130696). Mediates processing of TGFB1, an essential step in TGF-beta-1 activation (PubMed:7737999). Converts through proteolytic cleavage the non-functional Brain natriuretic factor prohormone into its active hormone BNP(1-32) (PubMed:20489134, PubMed:21763278). By mediating processing of accessory subunit ATP6AP1/Ac45 of the V-ATPase, regulates the acidification of dense-core secretory granules in islets of Langerhans cells (By similarity).
Cellular Location	Golgi apparatus, trans-Golgi network membrane; Single-pass type I

	membrane protein. Cell membrane; Single-pass type I membrane protein. Secreted. Endosome membrane; Single-pass type I membrane protein. Note=Shuttles between the trans-Golgi network and the cell surface (PubMed:11799113, PubMed:9412467). Propeptide cleavage is a prerequisite for exit of furin molecules out of the endoplasmic reticulum (ER). A second cleavage within the propeptide occurs in the trans Golgi network (TGN), followed by the release of the propeptide and the activation of furin (PubMed:11799113)
Tissue Location	Seems to be expressed ubiquitously.

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